

County of Loudoun
Department of Planning
MEMORANDUM

DATE: May 21, 2009

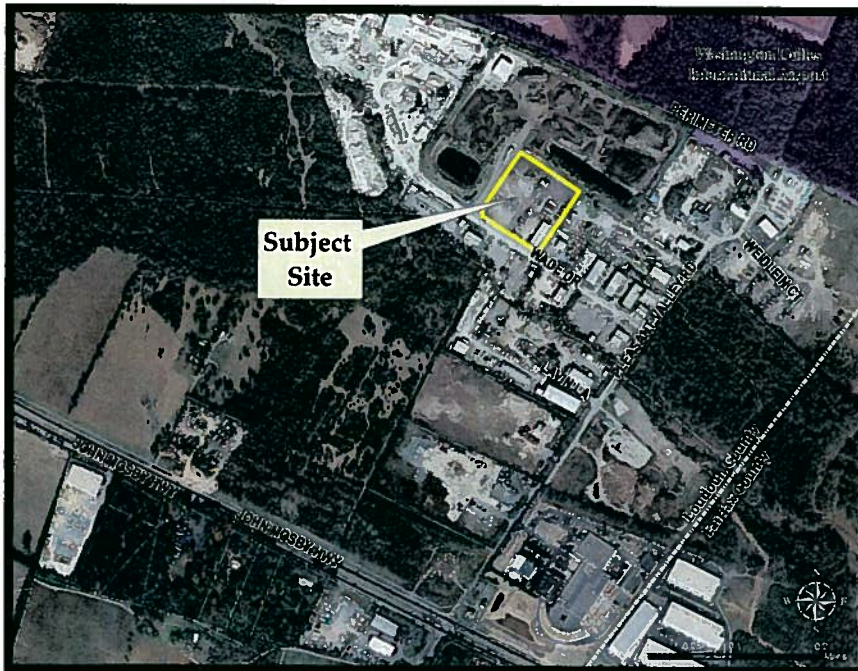
TO: Marchant Schneider, Project Manager
Land Use Review

FROM: Sarah Milin, Senior Planner *sm*
Community Planning

SUBJECT: SPEX 2009-0006, Dulles Industrial Park South Lot 1

BACKGROUND

Dulles South Properties, LLC and AmeriGas Propane have submitted an application for a Special Exception to permit the installation of two 30,000 gallon storage tanks for the distribution and storage of propane gas in the MR-HI (Mineral Resource-Heavy Industry) zoning district. The subject property is located within an industrial area on the



Vicinity Map

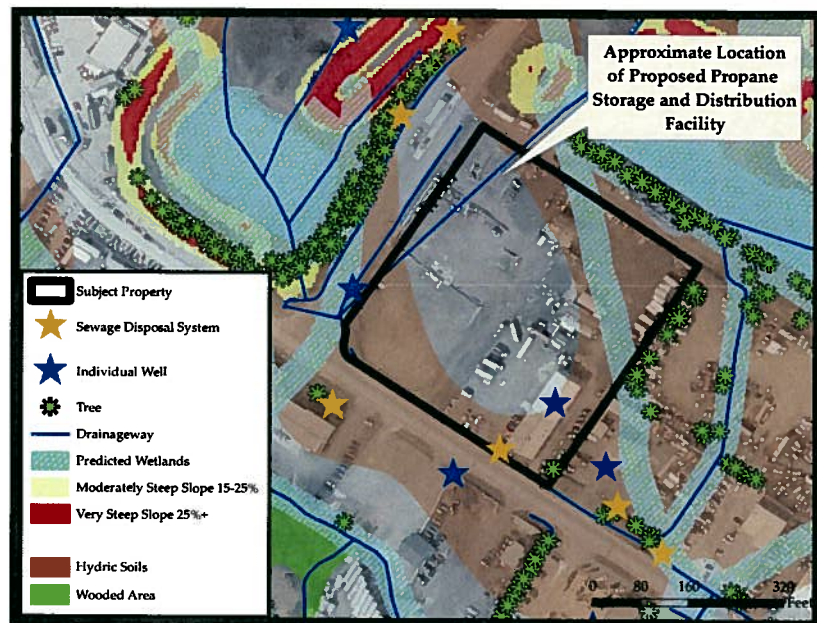
north side of Route 50, west of Pleasant Valley Road on Wade Drive (see Vicinity Map). The property is subject to the Revised 1993 Loudoun County Zoning Ordinance. Per Section 3-1004(Y) of the Zoning Ordinance, "storage, bulk gasoline, petroleum products and natural gas, small and large" require Special Exception approval in the MR-HI zoning district.

The subject property contains approximately 4.53 acres and has been

previously cleared and graded for development. Several buildings, including an office/heavy equipment repair building and storage sheds, are currently present on the site. The property is served by a private on-site sewer system and on-site well. The two proposed propane gas storage tanks are to be located on a concrete slab in the northwest corner of the property. A chain link fence is proposed around the Special

Exception area with evergreen tree plantings serving as the buffer along the southern side. According to the Statement of Justification, Loudoun County's rapid growth in recent years has resulted in a growing demand for petroleum products by residential, commercial and industrial customers. The nearest AmeriGas propane storage and distribution facility is located in Aldie, Virginia, approximately twenty miles northwest of the proposed site. There is significant demand for additional commercial propane distribution capabilities in southeast Loudoun County as well as Fairfax County and surrounding areas. AmeriGas propane is used in multiple commercial and industrial settings, including building constructions, filling stations, restaurants, hotels, schools, crematories, vehicles and forklifts.

A review of County GIS records indicates that a drainageway, hydric soils, a well, and a tree are located on the subject site. The Predictive Wetlands Model also indicates that wetlands may be present (see Green Infrastructure map). No floodplains or steep slopes are present. The subject site is located within the Ldn 65 airport noise contour associated with the Washington Dulles



Green Infrastructure Map

International Airport. With the exception of hydric soils and the airport noise contour, none of these Green Infrastructure elements appear to be located within the proposed Special Exception area. As such, no further impacts to any existing environmental feature on the site are anticipated with this application. Because the property has been previously developed, the Applicant has requested and been granted a waiver of the Archaeological & Historical Features requirement. Staff also notes that the submitted application includes a letter from the Virginia Department of Conservation and Recreation (DCR) dated December 11, 2008 raising concerns about possible impacts on the Cub Run Stream Conservation Unit.

COMPLIANCE WITH THE COMPREHENSIVE PLAN

Guidance for development of the subject property is provided by the Revised General Plan, as amended by the Arcola Area/Route 50 Corridor Plan. The Revised Countywide Transportation Plan and the Bicycle and Pedestrian Mobility Master Plan ('Bike/Ped Plan') also apply. The site is located in the Dulles Community of the Suburban Policy

Area and designated for Industrial uses (*Arcola Area/Route 50 Corridor Plan, Planned Land Use Map*).

The Plan states that areas in the Route 50 corridor like the subject site that are designated for Industrial uses are subject to the policies and land use mix ratios of Chapter 6 except as modified or supplemented by the Arcola Area/Route 50 Corridor Plan (*Arcola Area/Route 50 Corridor Plan, General Industrial Policy 1*). The application has been reviewed for conformance with the following policies of the Revised General Plan: Chapter 5, Green Infrastructure policies; Chapter 6, General Industrial Use policies; and Chapter 11, General Industry Design Guidelines. The proposal has also been reviewed for consistency with the Route 50 Corridor Design Guidelines.

ANALYSIS

1. Land Use

The Revised General Plan intends that areas planned for Industrial uses will accommodate the continued operation and expansion of major industrial uses in the County and provide a degree of protection for industrial uses from other land uses. Primary land uses in these industrial areas are General Industry and Heavy Industry (*Revised General Plan, Chapter 6, General Industrial text*). The County requires industrial uses provide adequate buffers and protection to mitigate negative impacts on surrounding uses (*Revised General Plan, Chapter 6, General Industrial text*). Plan policies also require all developments to take into consideration elements of the County's Green Infrastructure, which includes natural, cultural, heritage, environmental, protected, passive, and active resources (*Revised General Plan, Chapter 5, Green Infrastructure Policy 1*). In the Route 50 corridor, the County supports industrial uses as the preferred use in designated industrial communities (*Arcola Area/Route 50 Corridor Plan, General Industrial Policies 3 and 4*).

The submitted Special Exception application proposes an industrial use, specifically the bulk storage and commercial distribution of propane gas, on a property planned for Industrial uses and surrounded by other existing heavy industrial uses. The subject property currently contains an air compressor rental company and a landscaping company. Other properties in the site's immediate vicinity have been developed with a variety of heavy, light, and flex industrial uses, including several landscaping and composting companies, a crane service company, an irrigation supply company, large construction equipment and vehicle/truck storage companies, a concrete company, and a recycling and processing waste company. As such, the use of the subject site for the proposed propane storage and distribution facility appears to be in conformance with the Plan's vision for Industrial areas and is generally compatible with the surrounding industrial uses that currently exist in the area today.

Conditions of approval should be developed to ensure that any potential negative impacts that are generated by the proposed facility on either surrounding uses or the

environment will be avoided, minimized or mitigated. Staff notes that the Statement of Justification states that the proposed facility will have effective fire control measures and will adequately provide for safety from fire hazards; will only generate noise when the pumps are running, e.g. during business hours (Monday through Friday, 7:30 am to 5:00 pm); and additional lighting will not be needed. It also references the use of precast concrete piers with reinforcement as needed to support the propane storage tanks; a 6-foot high security fence around the tanks and piping; the use of a propane odorant for detection of a potential leak; and a remote emergency shut-off station between 100 and 255 feet from the tanks. With the exception of a chainlink fence and the evergreen tree buffer/screen, the Special Exception plat does not commit to these measures which could help ensure public and environmental safety. Appropriate conditions of approval could include the following:

- The propane storage tanks will be supported by precast, reinforced concrete piers;
- A minimum 6-foot high chainlink fence will be provided and maintained around the propane tanks and piping in order to prevent trespassing and tampering;
- The propane stored on the property will contain an odorant to detect potential leaks;
- A remote emergency shut-off station will be provided between 100 and 255 feet from the tanks in case a leak is detected;
- The pumps will run only during business hours (Monday through Friday from 7:30 am to 5:00 pm);
- No additional lighting will be provided on the subject site for the proposed use; and,
- The proposed propane tanks will be painted light, reflective colors for both safety and appearance purposes.

In order to help determine whether additional conditions are appropriate, staff requests that the Applicant provide more specific information regarding applicable federal, state, or other requirements that regulate propane storage facilities, for example whether bulk storage tanks need to be constructed of steel; how much distance each storage tank needs to be from other tanks, buildings, and property lines; etc.

Staff finds that the proposed propane storage and distribution facility is in conformance with the Industrial land use policies of the Revised General Plan. Staff recommends that appropriate conditions of approval be developed to ensure that potential negative impacts will be avoided, minimized or mitigated. To help staff with this analysis, the Applicant should provide information regarding federal, state and/or other regulations pertaining to propane storage and distribution facilities.

Staff defers to the Department of Fire and Rescue regarding fire safety at the proposed site. However, it may be appropriate to develop an emergency action plan in case of a propane leak, explosion or other emergency situation.

2. Stormwater Management

The subject property is located in the Bull Run watershed and drains to the Occoquan Reservoir, a drinking water supply. Currently, there does not appear to be a stormwater management (SWM)/best management practice (BMP) facility that stores and treats runoff from the site prior to discharging to the major floodplain. The proposed facility includes the installation of a concrete slab which will increase stormwater runoff. Additionally, the regular truck activity to and from this facility has the potential to release hydrocarbons at the site. The Revised General Plan states that major water resource issues for the County include protecting groundwater and surface water (i.e., streams and wetlands) from contamination and pollution as well as preventing the degradation of water quality in watersheds (Revised General Plan, Chapter 5, Surface and Groundwater text).

Committing to enhanced measures is particularly important given that the site is upstream of the Cub Run Stream Conservation Unit, which is considered to be a highly significant conservation site. According to the submitted letter from DCR, the natural heritage resource of concern associated with this conservation unit is the wood turtle (*Glyptemys insculpta*) which is classified as a threatened species. Plan policies state that development applications with the likelihood of impacting one or more natural heritage resources will conduct a species assessment and develop a plan for impact avoidance if the presence of a natural heritage resource is identified (Revised General Plan, Chapter 5, Plant and Wildlife Habitat Policy 8). DCR recommended the implementation of and strict adherence to applicable state and local erosion and sediment control/stormwater management laws and regulations to minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities.

Staff recommends that on-site water quality treatment be provided to help protect the Bull Run watershed and the Cub Run Stream Conservation Unit.

3. Site Design

The Plan envisions that general industrial areas will be designed with a park-like atmosphere to complement surrounding land uses by means of appropriate arrangement of buildings and service areas, attractive architecture, and effective landscape buffering. Site planning within a general industrial development should provide for safe, compact, and harmonious groupings of uses, facilities, and outdoor spaces. Yards, fences, walls or vegetative screening should be provided at the edges where needed to minimize any undesirable view, lighting, noise or other off-site influences from the street and to protect residents of adjoining residential neighborhoods (Revised General Plan, Chapter 11, General Industrial Design Guidelines).

The subject site is located in an existing industrial park and surrounded by other industrial uses (see pictures below). Although the Revised 1993 Loudoun County Zoning Ordinance does not require any landscaped buffers for the proposed use, the application proposes a row of evergreen trees along the southern side of the chainlink fence facing Wade Drive. While the Plan's screening and buffering policies for proposed industrial uses generally focus on mitigating impacts on adjacent roads and non-industrial areas including residential and business uses, the Plan specifically calls for the use of landscaping as buffers to break up monotonous parking surfaces, structural walls, and storage areas to enhance the aesthetic quality of General Industrial areas (Revised General Plan, Chapter 6, General Industrial Use Policies, Policies 2, 6, 9 and 10; Chapter 11, General Industry Design Guidelines). Given that no other landscaping currently exists on the subject property, staff encourages the Applicant to provide additional plantings adjacent to the proposed Special Exception area.



View of Wade Drive from Pleasant Valley Road



Subject Site Looking North to Proposed SPEX Area

Staff encourages the Applicant to provide additional landscaping along the property's boundaries to enhance the aesthetic quality of the subject property. Staff further recommends a condition to ensure the landscaped areas will be maintained for the life of the project. The use of native plant and tree species is encouraged.

RECOMMENDATIONS

The proposed propane storage and distribution facility is consistent with the land use policies of the Revised General Plan. Staff will be able to recommend approval of the Special Exception application once the issues raised above are adequately addressed and appropriate conditions of approval are developed.

cc: Julie Pastor, AICP, Planning Director
Cindy Keegan, AICP, Program Manager, Community Planning, via e-mail